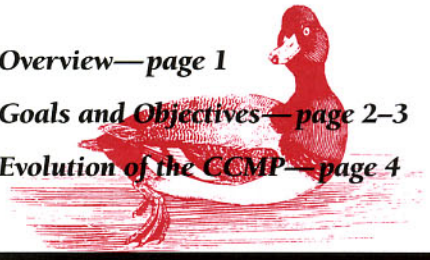
SAN FRANCISCO ESTUARY PROJECT

CCMP *Comprehensive Conservation and Management Plan, January 2003*

In 1987, the U.S. Congress created the National Estuary Program, with the goal of protecting and improving the water quality and natural resources of the nation's estuaries. Under Section 320 of the Clean Water Act, representatives of each estuary were directed to develop a* Comprehensive Conservation and Management Plan *(CCMP), containing recommendations for restoring and maintaining water quality; maintaining a balanced indigenous population of shellfish, fish, and wildlife; allowing recreational activities; and protecting the beneficial uses of the estuary.



The San Francisco Estuary Project

The U.S. EPA established the San Francisco Estuary Project as part of the National Estuary Program in 1987. The Estuary Project receives federal appropriations under the Clean Water Act and matching funds from the State of California and is a cooperative program designed to effectively manage the Estuary through implementation of the CCMP.

Why was such a project needed? In the 1970s and 1980s, California was at war over water. In a state where water is not plentiful, interests ranging from ports and industries wanting to dredge Bay-Delta waterways for commerce, to farmers needing more water for crops, to environmentalists hoping to conduct restoration projects, were at odds with each other. The Estuary Project brought these diverse stakeholders, as well as elected officials from the twelve Bay-Delta counties, together for the first time to address the Estuary's critical environmental problems. Private citizens, agencies, state, federal, and local governments, environmentalists, farmers, and others with an interest in the health of the San Francisco Bay-Delta Estuary began talking to each other about how to best manage this valuable natural resource. The stakeholders recognized that the San Francisco Bay-Delta ecosystem needed to be protected and restored while ensuring the continued economic vitality of the region. In a consensus-based decision-making process, this partnership worked to develop a CCMP to address those issues, determining schedules, actions, and commitments for future efforts.

Implementing the CCMP

The CCMP for the San Francisco Bay-Delta Estuary was developed by 100 stakeholders and approved by the U.S. EPA Administrator and Californi's governor in 1993. The CCMP set forth 145 specific actions needed to save fish, conserve water, reduce pollution, and promote environmentally sound decisions about land use. Concerns about the Estuary were divided into the following categories:

- decline of native aquatic flora and fauna
- decline of other wildlife dependent on the Estuary
- loss of wetlands
- water use (alterations of the Estuary's flow regime due to diversions)
- pollution

(continued on page 2)

"WE, THE PEOPLE of California and the San Francisco Bay-Delta region, believe the San Francisco Estuary is an international treasure and that our ongoing stewardship is critical to its preservation, restoration, and enhancement. Acknowledging the importance of the Estuary to our environmental and economic well-being, we pledge to achieve and maintain an ecologically diverse and productive natural estuarine system."

—San Francisco Estuary Project Management Committee

Implementation Oversight Structure

An Executive Council was established to provide broad policy direction for implementing the CCMP. The Council's membership includes the U.S. EPA Regional Administrator, Region 9; U.S. Fish and Wildlife Service California Nevada Operations Manager; Secretary, California EPA; Secretary, California Resources Agency; and one local government representative (the Association of Bay Area Governments and the Sacramento Area Council of Governments alternates this position every two years). Working under the policy direction of the Executive Council, an Implementation Committee coordinates implementation activities, sets priorities, comes up with work plans and budgets, and convenes working groups and subcommittees as needed. Comprised of 35 representatives from local/state/federal agencies, business/industry, and environmental organizations, the Committee is assisted by staff from the Association of Bay Area Governments, with the San Francisco Regional Water Quality Control Board as the lead implementing agency. The Friends of the San Francisco Estuary work with the committee to make sure that the public is involved and educated about the CCMP while the San Francisco Estuary Institute, another key partner, provides scientific and technical oversight of CCMP activities.

Goals and Objectives

The Estuary

The San Francisco Bay-Delta Estuary is the largest estuary on the West Coast and a vital resource for the state's human and wildlife populations. The Estuary system encompasses roughly 1,600 square miles, drains over 40 percent of the state (60,000 square miles), provides drinking water to 22 million Californians (two-thirds of the state's population), and irrigates 4.5 million acres of farmland. Two thirds of the state's salmon pass through the Bay and Delta, as do nearly half of the waterfowl and shorebirds migrating along the Pacific Flyway.

CCMP Milestones

December 1991—
Submission of first working draft to Management Conference

Winter-Spring 1992—
Conference review and deliberations to revise draft

Summer 1992—
Release of public draft

Early Fall 1992—
Public comment/ meetings/ workshops

November 1992—
Approval of CCMP by Conference; submittal to State and to U.S. EPA

June 1993—
CCMP adopted by Management Committee

November 1993—
Governor Pete Wilson concurred with the CCMP

December 1993—
U.S. EPA Administrator Carol Browner approved the CCMP

June 1994—
CCMP published

October 1996—
First Report Card (CCMP Workbook) published

March 1999—
Second Report Card published

September 2001—
Third Report Card published

(continued from page 1)

- impacts to the Estuary from dredging and modification of waterways
- urbanization and land use changes
- lack of public awareness and understanding of the Estuary
- lack of coordinated research and monitoring

The CCMP process encouraged open discussion of these issues, and the group concluded that

- The existing management system successfully addressed major problems, such as controlling point source discharges, upgrading publicly-owned treatment works, controlling Bay fill, and acquiring and enhancing wetlands and other sensitive ecosystems.
- The McAteer-Petris Act of 1965, the Porter-Cologne Act of 1969, and the Federal Water Pollution Control Act of 1972 were responsible for many improvements in water quality.
- The success of acquisition activities was largely due to U.S. Fish and Wildlife Service efforts to establish national wildlife refuges, the establishment of the California Coastal Conservancy, and private funding efforts of groups such as the Nature Conservancy.
- Current environmental laws promote species- and issue-specific resource protection rather than protecting whole ecosystems and biodiversity.
- The number and variety of agencies and entities involved in Estuary management are sometimes confusing to the general public, as well as to other resource managers and decision-makers. In some cases, legislation has created overlapping and conflicting agency mandates, making implementation difficult.
- In certain instances, agency jurisdiction is ill-defined and does not relate to the resources that are supposed to be protected.
- Goals and strategies for regional coordination of resource management are lacking in a number of areas.
- There is no legal requirement that local governments coordinate general plans with one another or provide protection to vital natural resources in the Bay-Delta area.
- Lack of sound scientific information hinders effective decision making related to natural resource protection.
- Agencies lack adequate financial and human resources to comply fully with mandates to implement programs. The permit review process has become slow and cumbersome.

In response to the concerns and findings listed above, the CCMP established the following goals and objectives.

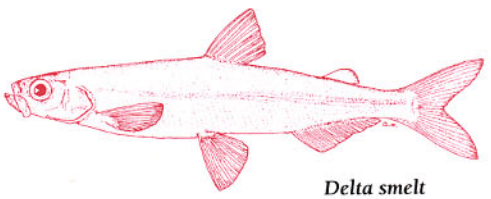
Aquatic Resources

Goals

- Stem and reverse the decline in the health and abundance of estuarine biota (indigenous and desirable non-indigenous) with an emphasis on natural production.
- Restore healthy estuarine habitat conditions to the Bay-Delta, taking into consideration all beneficial uses of Bay-Delta resources.
- Ensure the survival and recovery of listed and candidate threatened and endangered species, as well as other species in decline.
- Optimally manage the fish and wildlife resources of the Estuary to achieve the purpose of the goals stated above.

Objectives

- Improve the effectiveness of the techniques and programs used to evaluate and monitor the responses of the estuarine ecosystem to water management actions.
- Develop and implement species-specific management actions for the Estuary to assist in the recovery and maintenance of sustainable fish populations and to control or eliminate undesirable non-indigenous species.
- Implement recovery actions for all listed and candidate threatened and endangered species.
- Develop a comprehensive plan to optimize the management of estuarine aquatic resources that addresses the needs of all users and promotes an equitable balance; protects indigenous species; and, consistent with state and federal mandates, doubles the natural production of natural fishes.
- While awaiting completion of the comprehensive plan, and in order to create habitat conditions that contribute to the attainment of that objective, immediately implement a phased approach to provide needed (i) water quality, flows, and other operational measures; (ii) water management facilities; and (iii) other habitat components; so long as the phased approach significantly reduces impacts on aquatic estuarine resources and meets all environmental requirements.
- Develop and implement programs in the watershed above the Estuary necessary to complement that objective.

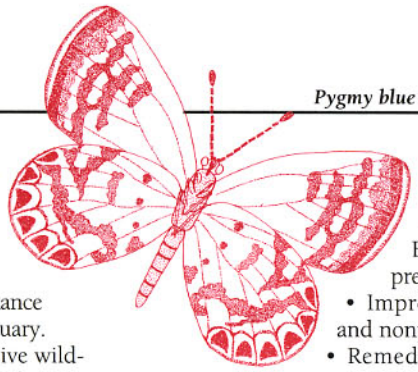


Delta smelt

Wildlife

Goals

- Stem and reverse the decline of estuarine plants and animals and the habitats on which they depend.
- Ensure the survival and recovery of listed and candidate threatened and endangered species as well as special status species.
- Optimally manage and monitor the wildlife resources of the Estuary.



Pygmy blue butterfly

Objectives

- Create and restore habitats critical to the survival of plant and animal populations, and enhance the biodiversity of the Estuary.
- Develop a comprehensive wildlife management plan for the Estuary.
- Develop predator control programs to decrease the impact of introduced species on listed and candidate species, as well as special status species.
- Implement management measures necessary to ensure survival and recovery of listed and candidate species as well as special status species.

Wetlands

Goals

- Protect and manage existing wetlands.
- Restore and enhance the ecological productivity and habitat values of wetlands.
- Expedite a significant increase in the quantity and quality of wetlands.
- Educate the public about the values of wetland resources.

Objectives

- Create a comprehensive, Estuary-wide wetlands management plan. [Each of the subsequent objectives would be components of the plan.]
- Improve the wetland regulatory system.
- Protect existing wetlands using existing, new, and expanded programs of wetland acquisition, easement agreements, and cooperative management systems.
- Expand the wetland resource base by restoring, enhancing, and creating wetland resources using a variety of approaches.

Water Use Recommendations

Goals

- Develop and implement aggressive water management measures to increase freshwater availability to the Estuary.

Objectives

- Develop water reclamation and the needed facilities to reuse water.
- Develop water conservation methods and facilities to increase the availability of freshwater for instream uses and water supply.
- Improve the legal and regulatory mechanisms to facilitate the voluntary transfer of water in order to increase the availability of freshwater for instream uses and water supply.

Pollution Prevention and Reduction

Goals

- Promote mechanisms to prevent pollution at its source.
- Where pollution prevention is not possible, control and reduce pollutants entering the Estuary.
- Clean up toxic pollution throughout the Estuary.
- Protect against toxic effects including bioaccumulation and toxic sediment accumulation.

Objectives

- Reduce pollutants into the Estuary by establishing a pollution prevention program.
- Improve regulatory systems for point and nonpoint source pollution control.
- Remediate pollution threats to public health and wildlife in the Estuary.

Dredging and Waterway Modification

Goals

- Eliminate unnecessary dredging activities.
- Maximize the use of dredged material as a resource.
- Adopt a Sediment Management Strategy for dredging and waterway modification.
- Manage modification of waterways to avoid or offset the adverse impacts of dredging, flood control, channelization, and shoreline development and protection projects.

Objectives

- Determine the behavior and fate of sediments to develop and implement policies to manage their modifications.
- Determine the bioavailability of contaminants released by disposal of dredged material through methods such as bulk chemistry assays, toxicity bioassays, and bioaccumulation tests.
- Develop a comprehensive regional strategy to better manage dredging and waterway modification and ancillary activities.
- Encourage the reuse of dredged material for projects such as wetlands creation/restoration, levee restoration, landfill cover, and upland building material where environmentally acceptable.
- Identify threats to and benefits for Estuary resources from future modifications to waterways.

Land Use

Goals

- Establish and implement land use and transportation practices that protect, enhance, and restore the Estuary's open waters, adjacent wetlands, adjacent essential uplands habitat, and tributary waterways.
- Coordinate and improve planning, regulatory, and development programs of local, regional, state, and federal agencies to improve the health of the Estuary.
- Adopt and utilize local land use policies that provide incentives for more active participation by the private sector in cooperative efforts that protect and improve the Estuary.

Objectives

- Use existing institutional capacity to improve planning, regulatory, and development programs of local, regional, and state agencies to protect the resources of the Estuary, in concert with a sustainable economy.
- Coordinate and improve integrated regional management for land use, transportation, housing, and physical infrastructure, to both protect the Estuary and provide for a sustainable economy.
- Provide for comprehensive watershed planning throughout the Estuary region to protect wetland areas and stream environments and reduce pollutants in runoff.
- Provide educational opportunities for the public and for government institutions as a foundation for protecting and enhancing the resources of the Estuary.
- Develop new public and private economic incentives and funding mechanisms to promote protection and restoration of the Estuary and provide a forum for stakeholders that improves communication and leads to better estuarine resource management.

Public Involvement and Education

Goal

- Build public understanding of the value of the Estuary's natural resources and the need to restore, protect, and maintain a healthy Estuary for future generations.

Objectives

- Develop CCMP public involvement, education, communication, and advocacy programs.
- Promote direct citizen involvement in studying, restoring, and managing a healthy Estuary.
- Develop and implement specific and targeted public education and involvement action plans about fish and wildlife resources and how to restore and improve their populations and habitat.
- Develop a flexible, sustainable, community-based organization framework, supported by public and private funds, for public involvement and education in all aspects of Estuary management.

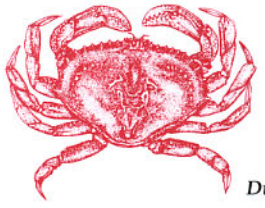
Research and Monitoring

Goals

- Improve the scientific basis for managing natural resources within the Estuary through an effective monitoring and research program.

Objectives

- Develop an estuarine research institute for the improved coordination and reporting of monitoring and research on the Estuary.
- Effectively monitor and conduct research on flow regime, pollutants, dredging and waterway modification, fish and other aquatic resources, wildlife, wetlands, and land use within the boundaries of the Estuary, using new and existing facilities, programs, agencies, and public involvement groups.



Dungeness crab

Evolution of the CCMP

Resources

San Francisco Estuary Project

Comprehensive Conservation and Management Plan (CCMP), 1993

Information Sheets: *Agricultural Drainage, Aquatic Organisms & Wildlife, Dredging, Land Use, Pollutants, Sacramento-SanJoaquin Delta, San Francisco Bay-Delta Estuary, Under Siege: Aquatic Invasive Species, Water Usage, Wetlands*

An Introduction to the San Francisco Estuary, 2000

Report Cards: *CCMP Workbook, October 1996, Bay-Delta Environmental Report Card, March 1999, Bay-Delta Environmental Report Card, September 2001*

State of the Estuary, 1990: A Report on Conditions and Problems in the San Francisco Estuary

State of the Estuary 2000: Restoration Primer

State of the Estuary 2002: Science & Strategies for Restoration

Status and Trends Reports, 1990-1992: *Aquatic Resources, Dredging, Land Use, Pollutants, Wetlands, Wildlife*

Contacts

San Francisco Estuary Project
1515 Clay Street, Suite 1400
Oakland, CA 94612-1413
(510) 622-2465
(510) 622-2501 fax
http://sfep.abag.ca.gov

Where Are We Today?

Every few years, the Estuary Project reconvenes the stakeholders to re-evaluate the group's priorities and goals for the CCMP. Stakeholders then record and evaluate their progress in a series of Reports Cards. Since 1993, the Estuary Project has released three such reports. The first tallied progress on all 145 CCMP goals; the second on ten top priorities; and the third on eight revised priorities encompassing 35 CCMP actions. At the August 2001 stakeholder meeting, the CCMP Management Committee revisited these top eight priorities, refining and rewording them for the coming years. Those priorities are to

- Expand, restore, and protect Bay-Delta wetlands;
- Reduce the impact of invasive species on the Estuary through prevention, control, eradication, and education;
- Protect and restore watersheds throughout the Estuary;
- Create incentives that encourage governments, landowners, and communities to protect and restore the Estuary;
- Minimize or eliminate pollution of the Estuary from all sources;
- Increase public awareness of the Estuary's natural resources and the impacts of human activity on them;
- Expand the regional monitoring program to address all key CCMP issues, and integrate the results of scientific monitoring into management and regulatory actions;
- Promulgate baseline inflow standards for San Francisco, San Pablo, and Suisun Bays to protect and restore the Estuary ecosystem.

The CCMP was the building block for many later Bay planning efforts like the signing of the 1994 Bay–Delta Accord, the establishment of x2 salinity standards, creation of the San Francisco Bay Joint Venture and the San Francisco Estuary Institute, and publication of the *Baylands Ecosystem Habitat Goals* and *Species and Community Profiles* reports. Today, CALFED, a cooperative state-federal effort working to balance the state's competing demands for scarce freshwater with restoration of the estuarine system, is developing science, grants programs, and geographic coordination that further the goals of the CCMP. The Estuary Project works closely with CALFED and other stakeholders to continue to ensure that the CCMP is implemented as envisioned.

CCMP Mission Statement

• Restore and protect a diverse, balanced, and healthy population of fish, invertebrates, wildlife, plants, and their habitats, focusing on indigenous species.

• Assure that the beneficial uses of the Bay and Delta are protected.

• Improve water quality, where possible, by eliminating and preventing pollution at its source, while minimizing the discharge of pollutants from point and nonpoint sources and remediating existing pollution.

• Manage dredging and waterway modifications to minimize adverse environmental impacts.

• Effectively manage and coordinate land and water use to achieve the goals of the Estuary Project.

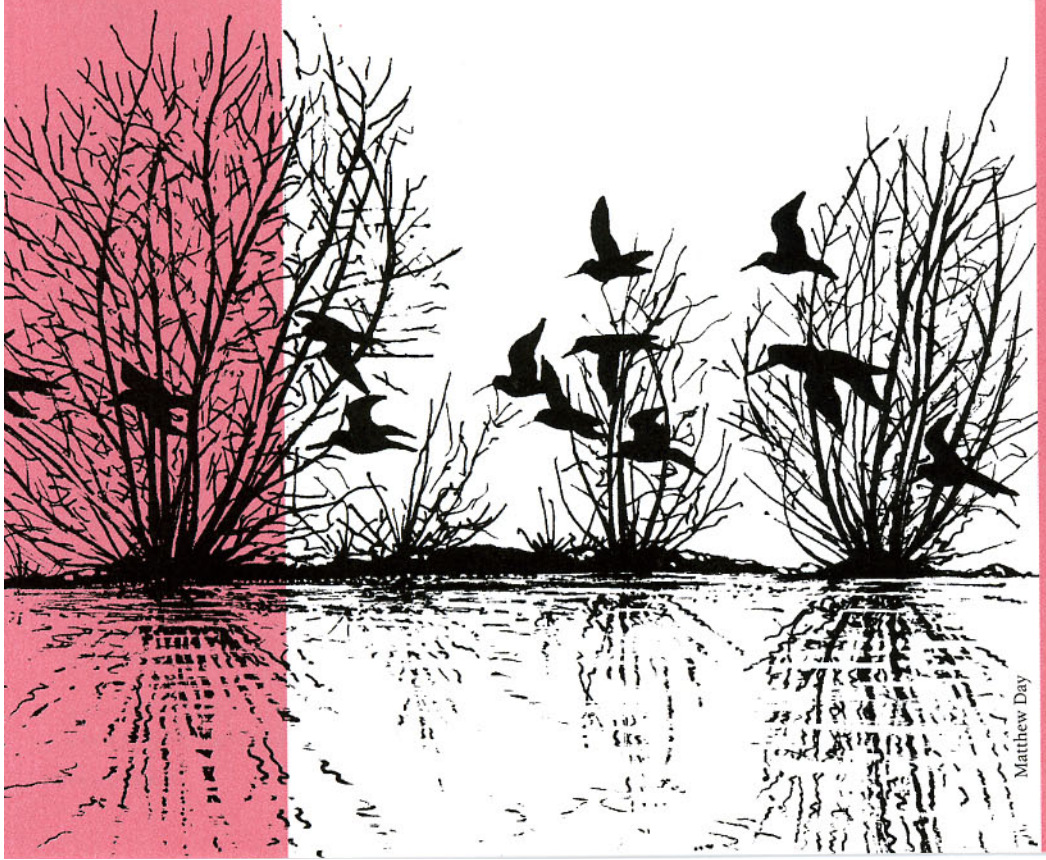
• Increase public knowledge about the Estuary ecosystem and public involvement in the restoration and protection of the health of the Estuary.

• Increase our scientific understanding of the Estuary and use that knowledge to better manage the Estuary.

• Develop and expand non-regulatory programs, such as public-private partnerships and market incentives, in conjunction with regulatory programs, to achieve the goals of the Project.

• Preserve and restore wetlands to provide habitat for wildlife, improve water quality, and protect against flooding.

• Assure an adequate freshwater flow as one of the essential components of restoring and maintaining a clean, healthy, and diverse Estuary.



Matthew Day

Published by SFEP, May 2003 Printed on recycled paper Editor: Lisa Owens-Viani Design: Nina Lisowski